

BEFORE THE
Federal Communications Commission

WASHINGTON, D.C. 20554

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MAR - 1 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of)

Amendment of the Commission's)
Rules to Permit Flexible Service)
Offerings in the Commercial)
Mobile Radio Service)

WT Docket No. 96-6

DOCKET FILE COPY ORIGINAL

To: The Commission

COMMENTS
OF THE
AMERICAN PETROLEUM INSTITUTE

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TABLE OF CONTENTS

	<u>Page</u>
SUMMARY	ii
I. PRELIMINARY STATEMENT	2
II. COMMENTS	4
A. Fixed Wireless Local Loop Will Encourage Systemwide Relocations of Microwave Incumbents	4
B. Any Additional Spectrum for Mobile Services Should Not Be Reallocated From the Fixed Services	7
III. CONCLUSION	13

SUMMARY

The American Petroleum Institute ("API") supports adoption of the Commission's proposal to clarify its rules so that Commercial Mobile Radio Services ("CMRS") providers can offer fixed wireless local loop service ("WLL") without first obtaining a waiver of technical rules. Implementation of the Commission's plan can facilitate the introduction of wireless loop service to remote oil and gas exploration and production sites that are difficult or impossible to serve reliably with cable or fiber plants. Adoption of this concept would also accelerate the introduction of PCS in rural areas, which in turn should lead to a more timely relocation of microwave incumbents in those areas. This plan thereby enhances the ability of microwave incumbents to obtain systemwide replacements rather than link-by-link relocations.

API is opposed to the Commission's suggestion that fixed services will require less spectrum in the next decade and therefore are a proper target for additional reallocations to mobile services. To the contrary, private fixed microwave services are currently being relocated to portions of the 6, 11 and 18 GHz bands, which are becoming overcrowded. It is too early to determine whether these

relocations will be successful, let alone to advocate additional dislocations of this nature. Should the Commission determine that mobile services require additional spectrum, it should look toward obtaining additional spectrum from other services and/or from the federal government's transfer of spectrum for private sector use.

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The American Petroleum Institute ("API"), by its attorneys, pursuant to Section 1.415 of the Rules and Regulations of the Federal Communications Commission (Commission), respectfully submits the following Comments in response to the Commission's Notice of Proposed Rule Making ("Notice")^{1/} that looks toward authorizing broadband Commercial Mobile Radio Service ("broadband CMRS") providers to offer fixed wireless local loop ("WLL") service.

^{1/} 61 Fed. Reg. 6189 (February 16, 1996).

I. PRELIMINARY STATEMENT

1. API is a national trade association representing approximately 300 companies involved in all phases of the petroleum and natural gas industries, including exploration, production, refining, marketing, and transportation of petroleum, petroleum products and natural gas. Among its many activities, API acts on behalf of its members as spokesperson before federal and state regulatory agencies. The API Telecommunications Committee is one of the standing committees of the organization's Information Systems Committee. The Telecommunications Committee evaluates and develops responses to state and federal proposals affecting telecommunications facilities used in the oil and gas industries.

2. API's Telecommunications Committee is supported and sustained by licensees that are authorized by the Commission to operate, among other telecommunications facilities, point-to-point microwave systems in the Private Operational-Fixed Microwave Service ("POFS") on assignments in the 1850-1990 MHz frequency band. These telecommunications facilities are used to support the search for and production of oil and natural gas. Such systems are also utilized to ensure the safe pipeline transmission of

natural gas, crude oil and refined petroleum products, and for the processing and refining of these energy sources, as well as for their ultimate delivery to industrial, commercial, and residential customers. The facilities licensed to and employed by API's members are therefore essential to the provision of our nation's energy sources.

3. API members utilize their POFS systems to serve a variety of vital point-to-point and point-to-multipoint telecommunications requirements, including communications between oil and gas exploration and production sites, for supervisory control and data acquisition (SCADA) systems, to communicate with refineries, and to extend circuits to pipeline pump and compressor stations. The oil and gas industries were among the pioneers in the development of private microwave, utilizing their systems to remotely monitor and operate petroleum and natural gas pipelines. Accordingly, the API Telecommunications Committee participated in the Commission's earliest rule making proceeding that addressed private microwave use of the spectrum;^{2/} and it has continued to be an active participant in every subsequent major proceeding affecting

^{2/} In re Allocation of Frequencies in the Bands Above 890 MHz, Report and Order, Docket No. 11866, 27 F.C.C. 359 (1959).

the POFS, including the Personal Communications Services ("PCS") (Docket Nos. 90-314 and 92-9) and Mobile Satellite Services ("MSS") (WT Docket No. 95-18) proceedings.^{3/}

II. COMMENTS

A. **Fixed Wireless Local Loop Will Encourage Systemwide Relocations of Microwave Incumbents**

4. API members conduct oil and gas exploratory drilling and production activities in many remote areas of West and Southwest United States. Wireline facilities are frequently unavailable to these sites and, for that reason, the oil and gas industries often have no choice but to install their own POFS facilities. Even where carrier-provided service is available, members of these industries may choose to construct and operate their own systems because of reliability or other concerns. However, implementation of the Commission's proposal may, in some circumstances, provide an option to oil and gas companies that they do not now enjoy.

^{3/} 60 Fed. Reg. 11644 (March 2, 1995).

5. Some of the POFS owned and operated by API members utilize assignments in the PCS A, B, C, D, E and F blocks. Many of these POFS systems extend across more than one state and traverse numerous Major Trading Areas and Basic Trading Areas. To avoid disruption of these vital systems, it is important for these API members that PCS licensees relocate incumbents' entire systems, or large portions thereof, simultaneously rather than to relocate separate links in a piecemeal fashion.

6. API supports adoption of the Commission's plan to permit CMRS providers to offer WLL technology to their customers. By extending the area which a PCS licensee may feasibly serve, implementation of this proposal may facilitate early PCS relocation of incumbent systems, particularly in rural areas. WLL will enhance the economic incentive for PCS licensees to offer service to less served areas which, in turn, will spur full system relocations in those areas.

7. Systemwide relocations are a matter of paramount concern to microwave incumbents; many of their systems are in areas which are sparsely populated. At present, these areas provide little financial incentive for deployment by PCS entities. Thus, many microwave incumbents are anxious

that crucial, rural-based portions of their systems might not receive a relocation offer for several years -- if ever.

8. Compounding this uncertainty is a proposal currently under consideration in the Commission's PCS cost-sharing rule making proceeding, WT Docket No. 95-157, which would terminate the primary status of microwave incumbent links as of April 4, 2005. This proposal would apply regardless of whether or not a PCS licensee needs the link and whether or not a relocation offer is ever presented to the microwave incumbent. This proposal would seriously damage the property interests of microwave incumbents that are operating systems in rural areas where PCS buildout is unlikely to occur by April 4, 2005.

9. The Commission's plan to authorize WLL in CMRS spectrum offers a ray of hope for these incumbents by extending the ability of a PCS licensee to employ their licensed spectrum to serve rural areas in an economical and timely manner. While API remains strongly opposed to the unwarranted "sunset" proposal to eliminate primary status for incumbents on a date certain, API embraces the Commission's current proposal to permit WLL as a means of expediting deployment of PCS. In fact, the Commission's WLL proposal renders the sunset proposal all the more

unnecessary because PCS licensees would have the ability to offer rural wireless loop service in an economically feasible manner that should encourage POFS system relocation.

10. The Commission's WLL proposal is particularly appropriate in light of Congress' and the Commission's desire to ensure that auctions and other Commission proceedings do not exclude rural America from the information society of the future. The sunset provision, however, provides an incentive to PCS entities to **not offer PCS services to rural America for another ten years.** The WLL proposal eliminates any excuses for PCS licensees to not offer to relocate incumbent links which are based in sparsely populated, or otherwise commercially undesirable, locations.

B. Any Additional Spectrum for Mobile Services Should Not Be Reallocated From the Fixed Services

11. The Commission invited comments on whether additional spectrum is needed for mobile services. Notice at ¶ 24. The Commission also invited parties to address whether that deficiency could be remedied by authorizing

mobile services in spectrum currently designated for fixed services ("FS"). Notice at ¶ 24.

12. Large blocks of spectrum have already been transferred from the fixed to commercial mobile services. FS users are currently absorbed in wholesale replacement of their microwave systems as a result of the PCS reallocation and may face similar costs as a result of the refarming proceeding, PR Docket 92-235.^{4/} Moreover, FS users have been targeted for relocation from the 2.1 GHz band in the Commission's Mobile Satellite Service proceeding, WT Docket No. 95-18.

13. The majority of incumbent users from the band 1850-1990 MHz have not yet been relocated. In addition, no FS user has spent one year using replacement facilities. Thus, it remains to be seen whether FS systems can be successfully relocated to other portions of the spectrum. Despite the lack of evidence that acceptable replacement spectrum exists for FS incumbents relocating from the 2 GHz band, the Commission now suggests that additional FS spectrum be transferred for future mobile services. API

^{4/} Report and Order ("Order") and Further Notice of Proposed Rule Making ("Further Notice") (PR Docket No. 92-235); FCC News, Report No. DC 95-86, (June 15, 1995).

believes the Commission must first ensure that sufficient replacement spectrum exists before it aspires to reallocate additional FS spectrum.

14. API is alarmed by the implication of the Commission's proposal to reallocate additional FS spectrum; the Commission seems to imply that no replacement spectrum would be made available for FS users in the future. The Commission cites reports of the National Telecommunications and Information Administration ("NTIA"), to support the Commission's tentative conclusion that "demand for fixed use will decrease." Notice at p. 15. API urges the Commission to carefully distinguish among the components of FS in order to avoid misconstruing NTIA's analysis of spectrum needs. NTIA's March 1995 Report examined all types of FS, including government, broadcast auxiliary, private operational-fixed microwave, common carrier, cable relay, UHF and VHF.^{5/} While NTIA concluded that cable relay FS will experience a dramatic decrease in spectrum need, common carrier microwave FS will decrease, and government FS is expected to remain steady or decline, NTIA found that demand for POFS will actually increase. The Report concluded that:

^{5/} U.S. National Spectrum Requirements, Projections and Trends, U.S. Department of Commerce, National Telecommunications and Information Administration, March 1995 (NTIA Special Publication 94-31).

[It] is expected that there will be a slow and steady growth in the private microwave services, amounting to a three percent growth rate, averaged over the next five years.

NTIA Report at p. 76. In addition, the NTIA Report observed that POFS applications such as SCADA require a high degree of reliability and are therefore not replaceable by other services. NTIA Report at p. 76. Thus, NTIA's conclusion that FS as a category of several diverse users may experience a decline in demand for spectrum does not mean that demand for spectrum among POFS users will decrease. While government FS, cable FS and common carrier FS are expected to decrease, demand for POFS will increase simultaneously.

15. In this era of general prosperity and economic expansion, POFS will require more, rather than less, spectrum over the next decade. Part of this increased demand will result from the normal growth over time of industries such as natural gas, petroleum, and electric utilities.

16. This increased demand cannot be adequately met by commercial service providers. Many FS users must maintain systems with high reliability and a high degree of control

over repair and maintenance in order to operate their pipelines, refineries, railroads, utilities, and other businesses, in a safe and effective manner. In addition, these same FS users must comply with Department of Transportation ("DOT") safety regulations for the transportation of oil, natural gas, liquid natural gas, chemicals, etc. This need for safety and reliability has resulted in a high level of demand among POFS users for licenses which are primary rather than secondary. Until compliance with DOT regulations and high reliability are guaranteed by commercial services providers, it is unrealistic to expect that demand will decrease for POFS having primary status. This situation is exacerbated by the Commission's decision in the PCS proceeding to halt licensing of new systems, and any modifications of existing systems, on a primary basis in the 2 GHz band.

17. Private FS users, particularly POFS entities, already face dwindling spectrum resources. In the Commission's Docket Nos. 90-314 and 92-9 that led to the reallocation of spectrum in the 2 GHz range for Emerging Technologies, including PCS, the Commission provided that incumbent POFS licensees utilizing assignments from the frequency band 1850-1990 MHz that are displaced by PCS licensees may relocate their POFS systems to the 6 GHz,

11 GHz and 18 GHz bands. Specifically, the Commission provided for relocation of existing 2 GHz licensees to the 5.925-6.425 GHz (lower 6 GHz), 6.525-6.875 GHz (upper 6 GHz), 10.7-11.7 GHz (11 GHz) and 17.7-19.7 GHz (18 GHz) bands.^{6/} These POFS incumbents will give up valuable, established systems -- many with essential long haul capabilities. Most of these systems have not yet been relocated by these users. Furthermore, in the 6 GHz, 11 GHz and 18 GHz bands made available to POFS, terrestrial users already share the allocations with Fixed Satellite Services ("FSS").^{7/}

18. Despite the fact that the Commission in the Emerging Technologies proceeding, ET Docket No. 92-9, cited the availability of spectrum for FS in the upper 6 GHz band, the United States delegation to 1995 World Radiocommunications Conference ("WRC-95") successfully reallocated the upper 6 GHz band for MSS feederlinks on a co-primary basis with FS. Unlike sharing between FS and

^{6/} Second Report and Order, ET Docket No. 92-9 (August 13, 1993) at 6497.

^{7/} This sharing with FSS is possible due to the fact that the FSS uplinks and downlinks remain in the same fixed location, permitting the coordination of both terrestrial and satellite users.

FSS, sharing between FS and MSS is expected to be particularly troublesome.

19. These and other Commission actions threaten to significantly reduce spectrum available for FS users. For example, the Commission's current rule making proposal for the MSS industry, WT Docket No. 95-18, targeted FS users for relocation from the 2.1 GHz band. The net effect of these proposals is a high level of demand for FS authority with primary status. API urges the Commission to stop its relentless attack on the interests of POFS users and to target services with declining spectrum use, if additional spectrum is needed for mobile services.

III. CONCLUSION

20. API strongly supports the Commission's proposal to permit CMRS providers to flexibly offer fixed WLL service. Implementation of the proposal is expected to expedite PCS rollout, particularly in rural and other less attractive locations. API opposes, however, going forward with any suggestion that POFS spectrum be targeted for future reallocations to the mobile services. Should the Commission determine that additional spectrum is, in fact, needed by mobile services, API suggests that the Commission allocate

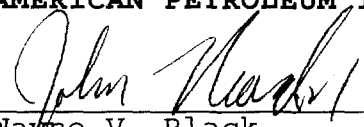
spectrum which is redesignated from government sector to private sector use.

WHEREFORE, THE PREMISES CONSIDERED, the American Petroleum Institute respectfully submits the foregoing Comments and urges the Federal Communications Commission to act in a manner consistent with the views expressed herein.

Respectfully submitted,

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